

ANTENNA STRUCTURE AND COMMUNICATION APPARATUS
INCLUDING THE SAME

ABSTRACT

In an antenna structure including a feeding radiation electrode and a non-feeding radiation electrode that are electromagnetically coupled to each other, due to formation of a main slit, the feeding radiation electrode includes a U-turn portion in the middle of a path circumventing the main slit from a feeding end to an open end. A sub-slit for forming an open stub that is connected to the U-turn portion and that provides the U-turn portion with electrostatic capacitance is formed in the feeding radiation electrode. By changing a value of the electrostatic capacitance to be provided by the open stub to the U-turn portion of the feeding radiation electrode, variable control of a higher-order resonant frequency F2 of the feeding radiation electrode can be achieved while suppressing fluctuations in a resonant state (for example, a fundamental resonant frequency F1 and a Q-value) of a fundamental resonant frequency band of the feeding radiation electrode, in an electromagnetic coupling state between the feeding radiation electrode and the non-feeding radiation electrode, and in an impedance matching state.